

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/33260

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 15/85, 15/86, 15/00; C12P 21/00; A61K 38/19
US CL : 435/325, 326, 70.1, 69.1; 514/2

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/325, 326, 70.1, 69.1; 514/2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y, T	US 6,517,830 (LOLLAR et al.) 11 February 2003 (11.02.2003), column 9, lines 25-55.	9, 19-20, 27-28, 43
X	KOBAYASHI et al. Improvement in the differentiated hepatic phenotype of immortalized human hepatocytes by adenovirus mediated p21 gene transfer. ASAIO J. January 2002, Vol. 48, pages 355-359, especially pages 355, 357, 358, 359.	1-8, 10-18, 22-26, 29, 35-36, 39-42, 44-45
Y	LUCAS et al. High-level production of recombinant proteins in CHO cells using a dicistronic DHFR intron expression vector. Nuc. Acids Res. October 1996, Vol. 24, pages 1774-1779, especially pages 1775 and 1778.	9, 19-20, 27, 28, 43
Y	MILLS et al. Induction of drug metabolism enzymes and MDR1 using a novel human hepatocyte cell line. J. Pharmac. Exp. Therapeut. January 2003, Vol. 309, pages 303-309, especially pages 303 and 304.	32-33
Y	JANSSEN et al. Expression of inter-alpha-trypsin inhibitor and tumor necrosis factor-stimulated gene 6 in renal proximal tubular epithelial cells. Kidney International, September 2001, Vol. 60, pages 126-136, especially pages 127-129.	9, 43

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- "T" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

06 July 2005 (06.07.2005)

Date of mailing of the international search report

29 JUL 2005

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PCT/US04/33260

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,806,351 (RUBEN et al.) 19 October 2004 (19.10.2004)	

INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

JPO, EPO, USPAT, USPGPUB, DERWENT, MEDLINE, EMBASE, BIOSIS: hepatocyte, immortalized, eukaryote, CHO, cell culture, COS, protein expression, expression vector, adenovirus, factor VIII, factor IX, p21, p53, Rb, inter.alpha.trypsin inhibitor, I.alpha.I, liver disease, protein processing, post translational modification, large T antigen, small T antigen, Fa2N, Ea1C, AMBP, H1, H2 and H3, dual or co-transfection, transformed, transduced.